



UNITED STATES PATENT AND TRADEMARK OFFICE

Cohn
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,643	11/07/2001	Francois Balay	Balay 1-20-3-1-1	9841
46900	7590	04/04/2006	EXAMINER	
MENDELSON & ASSOCIATES, P.C. 1500 JOHN F. KENNEDY BLVD., SUITE 405 PHILADELPHIA, PA 19102			HARPER, KEVIN C	
		ART UNIT	PAPER NUMBER	
			2616	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/045,643	BALAY ET AL.
	Examiner	Art Unit
	Kevin C. Harper	2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 January 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-38 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-38 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

Response to Arguments

1. Applicant's arguments filed January 20, 2006 have been fully considered but they are not persuasive. Applicant argued that Skirmont in view of Partridge does not teach or suggest the claims as amended. However, Skirmont discloses registers for different single channels (fig. 6, items 55, 61, 67 and 73) and a framer to communicate user data packets (fig. 7, item 79) with the registers on different single-channels and to communicate data with a module (fig. 5, item 45). Partridge discloses providing a packet delimiter between packets (col. 8, lines 1-5), the delimiters being inter-packet fill. The motivation for the combination is to provide a separator to detect packet boundaries (Partridge, col. 8, lines 1-5).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 6-7, 9-11, 15-20, 23-24, 26-28 and 32-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skirmont (US 2002/0136208) in view of Partridge (US 6,160,819).
2. Regarding claims 1-2, 11, 15, 18-19, 28 and 32, Skirmont discloses a transceiver (fig. 5) coupled to at least two single-channel links (fig. 5, items 35-41; fig. 4, items 35-41) of a high bandwidth link (fig. 5, OC-192c). The transceiver comprises at least two registers (fig. 6, Sync FIFO) each associated with a different single-channel link and communicating a portion of user data (fig. 7) with a module (fig. 5, item 45), and a framer (fig. 5, item 47) providing user data as packets (fig. 7) to the registers (para. 31, lines 1-5) or providing packets from the registers (para. 30, lines 3-6). Each register provides a packet toward a single channel link (fig. 8).

3. However, Skirmont does not disclose a framer for ensuring a packet has a delineator or forming a packet and extracting user data. Partridge discloses a framer for inserting a delineator in every packet (fig. 3; fig. 4, steps 403 and 408; col. 8, lines 1-3) and for forming a packet and extracting user data (fig. 6, steps 606 and 608). The delineator is inter-packet fill (note: the end of packet is determined which separates two packets) and the delineator is removed (fig. 6, step 607). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to delineate packets and to form a packet for a high bandwidth channel by extracting user data in the invention of Skirmont in order to be aware of a packet boundary (Partridge, col. 8, lines 3-5) and to combine data for transmission on a higher speed link (Partridge, col. 5, line 60 through col. 6, line 2), respectively.

4. Regarding claims 3, 6, 9, 16, 20, 23, 26 and 33, in Skirmont the link is a SONET serial link (fig. 5, link between items 49 and 47; para. 10).

5. Regarding claims 7 and 24, in Skirmont the channel links are parallel (figs 3-6 and 8).

6. Regarding claims 10, 17, 27 and 34, in Skirmont the transceiver is embodied in an IC (para. 27; para. 29, lines 5-6).

7. Regarding claims 35-38, in Skirmont the packets of the single-channel links are of various sizes (para. 34, lines 1-2; note: standardized IP packets having a variable sized payload).

Claims 4-5, 13-14, 21-22 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skirmont in view of Partridge as applied to claim 3, 11, 20 or 28 above, and further in view of Walker et al. (US 2004/0228364).

8. Regarding claims 4-5 and 21-22, Skirmont discloses an Ethernet link (para 6, last three lines). However, Skirmont does not disclose 8B/10B coding. Walker discloses 8B/10B coding

(fig. 1) that includes scrambling (note: DC balance). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have 8B/10B coding for Ethernet in the invention of Skirmont in view of Partridge in order to use a widely available and common coding protocol (Walker, para. 3, lines 5-13).

9. Regarding claims 13-14 and 30-31, Skirmont in view of Partridge does not disclose CRC information. Walker discloses CRC information (para. 39). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include CRC information in the invention of Skirmont in view of Partridge in order to reduce transmission errors in a received packet.

Claims 8 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skirmont in view of Partridge as applied to claim 3 or 18 above, and further in view of Dellacona (US 6,799,224).

10. Regarding claims 8 and 25, Skirmont in view of Partridge does not disclose the channel links of the router operating according to a PCI bus standard. Dellacona discloses internal components of a device operating a PCI standard (fig. 1; col. 5, lines 59-60). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a PCI bus standard in the invention of Skirmont in view of Partridge in order to provide a standardized high speed component interconnection (Dellacona, col. 1, lines 23-26).

Claims 12 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skirmont in view of Partridge as applied to claim 3 or 28 above, and further in view of Williams et al. (US 5,018,132).

11. Regarding claims 12 and 29, Skirmont in view of Partridge does not disclose a message channel. Williams discloses a signaling channel for SONET (col. 1, line 61 through col. 2, line 5). Therefore, it would be obvious to one skilled in the art at the time the invention was made to have a signaling channel in the invention of Skirmont in view of Partridge in order to provide transmission of signaling information within a network (Williams, col. 2, lines 43-54; col. 1, lines 35-54).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

Art Unit: 2616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To, can be reached at 571-272-7629. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov. Previous art units 2661-2668 have merged to form a new art unit 2616. A similar restructuring has taken place for all other art units in TC 2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

March 27, 2006



DORIS H. TO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600